Health Promotion and Disease Prevention: An Introductory Article

Introduction

This article provides an overview of the field of health promotion and disease prevention. It is intended for individuals who have little or no experience with this topic but are interested in conducting health promotion activities. The goals of this article are to

- Familiarize the reader with the central concepts to health promotion and disease prevention.
- Explain the history and discipline of the health promotion and disease prevention field.
- Provide an introduction to some practices and theories used to promote health and prevent disease in communities.

This article should serve as a starting point to building the reader's knowledge about health promotion and disease prevention. It also should encourage individuals to seek out additional information to assist them in pursuing their health promotion interests.

Overview of Health Promotion and Disease Prevention

The idea of health promotion may seem straightforward: we simply need to give people the correct information and tell them how to eat right, get some exercise, see the doctor when feeling ill, and in some instances quit smoking or drink less. Over the years, however, health professionals have learned that it takes more to improve the public's health than just offering information. It is not easy to ask people to change their unhealthy behaviors, especially if they have been doing these things for a long time. In addition, even if people want to change their behaviors, sometimes the communities in which they live make it difficult to change. For example, a person may want to exercise more, but it is unsafe for him to go outside and walk through the neighborhood. In general, we have learned that changing health behaviors is a complex process and that we cannot always depend on individuals to be interested or motivated to make a positive health change (Green and Kreuter, 1990).

Fortunately, the field of health promotion and disease prevention recognizes the difficulties in changing behavior and is better equipped to help people improve their health and well-being. People engaged in health promotion try to adopt a "holistic" or broader view of health that focuses on all the influencers of behavior, including the individuals, their families and communities, and the circumstances in which they live. Through conducting research to understand both the health issues affecting communities and the circumstances that create them, as well as through applying theories that address multiple levels of health, health promotion and disease prevention activities have achieved positive changes in the health of individuals and communities.

Definition of Health vs. Disease

An important starting point to conducting health promotion and disease prevention activities is understanding what the terms "health" and "disease" mean. The Centers for Disease Control and Prevention (CDC), the leading public health institution in the United States, defines disease as an interruption or disturbance of the bodily functions or organs that causes or threatens pain and weakness. Most people are familiar with the more serious types of diseases, like cancer and HIV/AIDS. However, disease also includes such illnesses as the common cold, diabetes, and arthritis. Anything that negatively affects our physical functioning can be a disease. Most people would never try to get a disease. However, they do things on a daily basis to put them at risk for disease, such as smoking or not exercising.

Given the definition of disease, we might expect the definition of health to be the lack of disease in a person. However, there is more to consider when thinking about health. The World Health Organization (WHO), which leads global initiatives to improve health, defines health as a state of physical, mental, and social well-being, not merely the absence of disease and illness (Breslow, 1999). This definition encompasses people's mental health, in addition to a lack of disease. It also suggests that to be productive and healthy members of our community, we must be able to feel strong and supported by others around us—that we have opportunities to live life as we wish.

Defining Health Promotion and Disease Prevention

So now that "health" and "disease" have been defined, what exactly are health promotion and disease prevention? Health promotion concerns helping people to increase control over, and to improve, their health (Ottawa Charter for Health Promotion, 1986). For many years, the way health care professionals went about improving health was through education, providing individuals with information intended to encourage positive health behaviors. Today, health promotion still relies on providing health education, but it also considers those things that influence people's behavior choices, such as their values, beliefs, attitudes, and motivations about behavior. In addition, health promotion recognizes that people do not make choices solely on their own and that we must consider people's social environments, such as their family, friends, community, culture, economic situation, and political forces. Promoting health also requires understanding how social policy (such as laws and rules concerning government functioning) and community structures (such as families, churches, and schools) can be changed or used to support positive health in communities. Ultimately, health promotion activities seek to empower individuals and their social environments to organize, prioritize, and act on health issues according to local needs (Whitehead, 2004).

Disease prevention, on the other hand, involves efforts to stop the onset of a specific illness or condition, such as heart disease, diabetes, or cancer (Breslow, 1999). An example of disease prevention would be a program that tries to get people to stop smoking to prevent cancer or to exercise regularly to prevent heart attack and strokes. Disease prevention can also include efforts at detection of disease while in an early stage. For some diseases, the best approach to preventing death or illness from the disease may depend more on detecting it early than on any specific behavior that can be done to prevent it. Regular mammograms for women would be an example of disease prevention for breast cancer that relies on detection.

Both health promotion and disease prevention share the goal of improving health. A difference between them is that health promotion activities may be more general and concern improving someone's overall well-being. Disease prevention is more focused, concentrating prevention efforts on one specific illness. Another distinction is that health promotion activities may be more inclusive of community, seeking the input of others about health concerns and their priority in a community. Disease prevention is more likely to stem from outside information that suggests a significant health need in a community, such as rates of a particular disease as collected by a local health department. Together, health promotion and disease prevention efforts can improve and maintain the health of people in your community.

History

Modern medicine and its related fields are products of the 20th century, but the idea of health promotion dates back much further. Hippocrates, a Greek physician born in 460 BC, went against the belief of his time to suggest that the body was influenced by outside forces. He argued the need to consider environmental influences on health, such as the role clean water plays in staying healthy. He also believed that physicians should build a patient's strength through diet and hygiene, resorting to more drastic treatment only when necessary (National Center for Health Promotion and Disease Prevention, 2004).

It would be almost 2,000 years later before Hippocrates' ideas would be realized in improving the health of populations. In England in the 19th century, two early health scientists, William Far and John Snow, used insights similar to those of Hippocrates to improve the health of people in their time. They examined patterns of death in communities in London and traced water sources to the houses of diseased individuals. John Snow was able to determine that the drinking water transmitted cholera and that people got sick depending on which part of the Thames River they drank from (Hennekens and Buring, 1987).

Another step forward in promoting health was the adoption of the yearly checkup. In the 1920s, as advances in medical science allowed physicians to increasingly treat medical conditions, interest turned to the early detection and diagnosis of diseases to stop them before becoming serious. A steady increase in the number of tests that could be conducted and their related costs caused health researchers, by the 1960s, to start to look for things that could be done to improve health outside of the clinical setting (National Center for Health Promotion and Disease Prevention, 2004).

In the international arena, the growing inequity in health around the world also played a role in shaping health promotion and disease prevention efforts. In 1978, WHO and the United Nations Children's Fund (UNICEF) held a major conference at Alma Ata in the Union of Soviet Socialist Republics (USSR), attended by 134 nations. The outcome was the Alma Ata Declaration, which recognized that health is more than the absence of disease and which expanded the idea that people are affected by their social, economic, and natural environments. Alma Ata and later conferences on international health made health promotion a major part of their agenda for improving world health (Green and Kreuter, 1990).

In the United States, the U.S. Surgeon General released his own call for preventive health by preparing the 1979 report, *Healthy People.* This report laid the foundation for a national prevention agenda because it set objectives for States and communities to improve health. Since the first report in 1979, new *Healthy People* reports have been issued every 10 years, with the current report, *Healthy People 2010,* providing health promotion goals for our decade (Green and Kreuter, 1990).

Related Academic and Professional Fields

With both national and international interest in promoting health and preventing disease, it should not be surprising that new careers in health promotion and disease prevention have developed to meet a growing demand. Primarily, the schools of public health have provided training to practitioners of health promotion and disease prevention. These schools, usually located at large universities, provide training in tracking diseases in populations and in determining the causes of these diseases. They also train practitioners in theories for changing people's health behaviors.

Since the concept of health can be diverse, many other fields of study contribute to our understanding of health promotion and disease prevention and provide training to professionals in the field. Social psychology has been one important field that has provided key insights used to influence individuals' health behaviors. Other fields engaged in health promotion are sociology, anthropology, geography, economics, and communications.

Many individuals who seek more traditional degrees in medical care, such as nurses and doctors, may also receive education in health promotion and disease prevention and can specialize in the field.

Healthy People 2010

To engage in health promotion and disease prevention activities, and as an important first step, one should become oriented to the health problems and related behaviors that affect communities and put people at risk for disease or illness. One way to do this is to look at the *Healthy People 2010* report prepared by the U.S. Surgeon General. Launched in January 2000, *Healthy People 2010* provides an overview as well as objectives for overcoming the Nation's leading health challenges. Its main goals are to

- Increase quality and years of healthy life.
- Eliminate health disparities.

Healthy People 2010 builds on the effort initiated over 20 years ago to develop comprehensive health objectives that can be used to effectively direct health promotion and disease prevention efforts. Like its predecessor, *Healthy People 2010* identifies the most significant preventable threats to the health of American people and establishes a framework for use by States, communities, organizations, and individuals for health promotion. *Healthy People 2010* reinforces the concept that improving the health of the Nation requires the long-term commitment and participation of all.

Developed through a broad-based community process, *Healthy People* identifies significant opportunities to improve health and focuses attention on special populations, including minority and older Americans. In this latest version, specific objectives are accompanied by corresponding baseline data. These data provide evidence of health disparities placing specific populations at higher risk than the general population. More information on *Healthy People 2010* can be found at the Department of Health and Human Services Web site for *Healthy People 2010*, http://www.healthypeople.gov/.[1]

Science: The Basis of Health Promotion and Disease Prevention

To be effective at promoting health and preventing disease, one first needs to understand that such activities are guided by a scientific process. Most important, health promotion practices should follow a logical plan, and decision making should be based on the best available research and information that can be collected on the health issues and the populations they affect. Health promotion should not be approached with preestablished ideas of what needs to be done.

Following a logical plan is another way of saying that health promotion practices need to use theory and that theory should inform health promotion practices. Theories used in health promotion and disease prevention do not need to be overly complicated; a theory simply provides a reasonable explanation of why things are occurring the way they are, and then allows us to predict future occurrences or events. We can validate or check the usefulness of a theory by observing to see whether things occurred in the way we expected. If they have, we will know that the theory was useful and can potentially help us with future health promotion activities.

In doing health promotion work, we can find that we are creating our own theory to describe and understand a health problem and what can be changed. At the same time, we can call on and use theories created by others to help guide and plan health promotion and disease prevention activities (National Cancer Institute, 1995).

Use of Theory for Understanding Health in Communities

One principal approach used to understand the health problems and factors that affect groups of people and influence health in communities is the ecological perspective (Glanz, Lewis, and Rimer, 1997; Gregson et al., 2001). Ecological theories attempt to link multiple levels of influences to people's health.

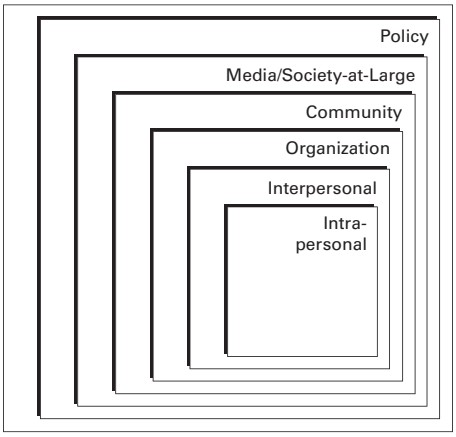
The following figure provides a visual diagram of our understanding of how health is influenced on multiple levels, including (1) the individual (intrapersonal), (2) the people we interact with (interpersonal), (3) the groups or organizations we belong to, (4) the community we live in, (5) the media we are exposed to, and (6) the policies that shape our worlds (McLeroy et al., 1988).

[1] This section was adapted from the Department of Health and Human Services, Administration on Aging Web site, http://www.aoa.gov/prof/adddiv/healthy/addiv_healthy.asp.

These six influences work in combination to affect a person's health. Further, all of these levels are linked in such a manner that a change in one can cause changes in the others (e.g., a change in policy or community may influence individual behaviors, or individual behaviors can lead to changes in policy and community). In improving health, it is generally believed that changes made on more than one level at a time will have a better chance of influencing health.

In starting health promotion and disease prevention activities, it is recommended that one begin by developing an understanding of how these different levels of health influences connect to a particular health problem in a community. Generally, one develops this understanding through research, in which those involved in health promotion gather or collect data on all the levels thought to be influencing a health concern. Then, they create their own descriptive explanation for how the different levels interact to create the current health situation. Often, they use visual diagrams to help depict the multiple relationships being discussed.

Ecological Model of Influences on Health Behavior



Theory for Improving Health and Changing Behaviors

To best influence change at any level in the ecological model depicted above, one should consider relying on any number of theories on health behavior change. Theory is the driving force for the health promotion and disease prevention process. Theory also provides both a way to gain a better understanding of complex health issues and a set of tools for planning and creating changes in health. There are numerous theories to consider in conducting health promotion and disease prevention work. We present a review of some basic theories in the following paragraphs.

Individual-Level Theories

Most theories for changing health behaviors have been focused on predicting the actions of individuals and the influences on them. Many of these theories come from the academic field of psychology and look at cognitive characteristics of individuals, such as their knowledge, attitudes, beliefs, perceptions, motivations, and self-concept toward a behavior (Coreil, Bryant, and Henderson, 2001). See *Appendix A* for descriptions of some individual-level theories.

Interpersonal-Level Theories

The interpersonal level concerns not only the characteristics of the individual, but also the individual's relationships with other people. These theories look at how people interact and learn from others and the importance they place on those interactions. A good example of an interpersonal theory is the social learning or social cognitive theory. See *Appendix B* for descriptions of some interpersonal-level theories.

Community-Level Theories

Community-level theories offer a broader approach to improving health that often considers how community institutions, such as schools and government, influence health behavior changes. Such theories are aimed directly at changing people's environments to bring about changes that will support good health at multiple levels of the ecological model. See *Appendix C* for descriptions of some community-level theories.

Framework for Health Promotion and Disease Prevention

Thus far, we have discussed concepts and theories used to promote health and prevent disease. You may be asking, "How do I use this information in a way that brings it all together?" Many frameworks exist to plan health promotion and disease prevention activities, but they share a set of similar stages that must be followed. The figure below outlines some basic stages that many of these frameworks or models share.

Common Planning Stages Used in Health Promotion and Disease Prevention Projects

Stage 1. Planning and Research

Stage 2. Message and Materials Development

Stage 3. Pretesting

Stage 4. Implementation

Stage 5. Evaluation and Feedback

Social Marketing Framework

Social marketing is an approach that uses such marketing concepts as *Price*, *Product*, *Promotion*, and *Place* to influence health behaviors in a positive manner. By nature, the marketing process is circular, requiring application of stages in a planning process that can be revisited once the original process has been completed.

For Further Reading

Andreason, A. (1995). *Marketing social change: Changing behavior to promote health, social development, and the environment.* San Francisco: Jossey-Bass.

Kotler, P., and Roberto, E. L. (1989). *Social marketing: Strategies for changing public behavior.* New York: Free Press.

Lefebvre, R. C., and Rochlin, L. (1997). Social marketing. In K. Glanz, F. M. Lewis, and B. K. Rimer (Eds.), *Health behavior and health education: Theory, research, and practice* (2nd ed.). San Francisco: Jossey-Bass.

PRECEDE-PROCEED Framework

The PRECEDE-PROCEED framework is a systematic planning process that seeks to empower individuals and communities to understand and engage in efforts to improve the quality of life. It has different phases that can easily be linked to different levels of theory for health behavior change.

For Further Reading

Green, L. W., and Kreuter, M. W. (1999). *Health promotion planning: An educational and ecological approach* (3rd ed.). Mountain View, CA: Mayfield.

Green, L. W., and Ottoson, J. M. (1999). *Community and population health* (8th ed.). New York: McGraw-Hill.

Evaluation

An important but sometimes overlooked stage in any health promotion and disease prevention activity is evaluation. Evaluation is important because it lets us know how well we achieved our goals. Without evaluation, a health promotion project could progress, taking time and money, but not make a difference in improving the health or disease that it is designed to address.

Evaluation is a process that starts even before one actively works to promote health in a community. It starts when one begins to explore and research the needs of a community or the health issues that are most important to address. Evaluation, when done right, is an ongoing process that allows for refinement to achieve the best possible program for the community and has the most successful outcomes.

Various frameworks can be used to plan and conduct an evaluation of health promotion and disease prevention programs. CDC has created its own that can be adapted to meet the needs of almost any project. For more information on CDC's framework, visit http://www.cdc.gov/eval/framework.htm#summary.

Special Populations to Address in Health Promotion and Disease Prevention

We recognize that everyone in a community might benefit from a health promotion and disease prevention program. However, we also realize that certain groups within our society are especially vulnerable to health problems or have special health needs. These special populations may bear a greater burden of disease and injury, or they may face additional barriers to accessing health care services.

Some special populations include the following:

- Women and children
- Adolescents
- Older persons
- Minority populations
- People with disabilities
- People of low income

Refugees

Refugees are another group who face special health challenges, both as new arrivals into the United States and after they have been in the United States for some time. It may be helpful to think of the health challenges to refugees in terms of the stages they go through in getting to the United States, starting with conditions in their country before leaving it (pre-migration), their travels to the United States (migration), and their eventual resettlement in the United States (Palinkas et al., 2003).

Pre-Migration Health Issues. Many refugees come from countries with poor public health systems. They may need medical services to treat infectious diseases that exist in their home country or chronic health conditions that have not previously been addressed. Refugees may also come from countries in war, where they saw or experienced torture and persecution. These events may lead to a greater risk for depression, stress-related disorders, or other mental health problems. Some individuals may benefit from clinical psychiatric services to help them cope with ongoing stress or for treatment of disabling symptoms. For some, this struggle may be lifelong, requiring ongoing support from those around them.

Migration Health Issues. Many refugees do not come directly to the United States. Instead, they first have to go to a refugee settlement (or camp) in a nearby country. These settlements or camps usually are crowded, and diseases are easily spread. Many times, the camps do not have adequate resources to meet the health needs of the people living in them. Therefore, many refugees need medical attention when they first arrive in the United States to treat infectious, parasitic, or other conditions from their travels. Additionally, the process of being forcibly displaced or experiences of torture and persecution during migration can contribute to mental health issues for refugees.

Resettlement—Initial Health Issues. Once in the United States, refugees usually settle in communities that are unfamiliar to them. Many of their day-to-day tasks are new. For example, grocery stores may not have the foods that they are used to. Refugees often have to develop such new skills as how to use the local buses or trains to get around town, or how to find a job. Refugees also may face new challenges to staying healthy. For example, new diets can lead to obesity and diabetes. They may have to address and respond to such chronic illnesses as heart disease and high blood pressure, or conditions that were not treated in their native countries. Refugees might not know about or use such prevention screenings as mammograms or cholesterol tests. Refugees also can be at higher risk for depression and other mental health issues.

For Further Reading

Gavagan, T., and Brodyaga, L. (1998, March 1). Medical care for immigrants and refugees. *American Family Physician*. Retrieved from http://www.aafp.org/afp/980301ap/gavagan.html.

Palinkas, L. A., Pickwell, S. M., Brandstein, K., Clark, T. J., Hill, L. L., Moser, R. J., and Osman, A. (2003). The journey to wellness: Stages of refugee health promotion and disease prevention. *Journal of Immigrant Health, 5*(1), 19-28.

Toole, M. J., and Waldman, R. J. (1993). Refugees and displaced persons: War, hunger, and public health. *Journal of the American Medical Association, 270*(5), 600-606.

In promoting health in special populations, one must give careful consideration to the circumstances that make groups more vulnerable in terms of health and disease. In many cases, it will be the factors that make such populations special that will need to be addressed first, if any long-term changes in people's health are to be made. Another issue that can complicate assisting such special populations as refugees is language and cultural difference. Speaking a language that is different from health care providers can limit people's access to and use of health services. In addition, cultural differences may lead special populations to think about and treat illnesses differently from most health workers. These differences are not necessarily wrong, but they do need to be considered in any effort to promote health and prevent disease in populations with differing cultural backgrounds.

Channels for Promoting Health

As you begin to develop your health promotion and disease prevention program, it is important to consider how to reach groups with health information, messages, and services. The field of health promotion and disease prevention has borrowed concepts from marketing and communication to most effectively reach people with its messages. An important concept is narrowing your efforts to focus on smaller subsets of groups or target audiences. The idea is that no single type of program will work with everybody, so it is best to focus on one target audience that is most in need or the easiest to reach.

The concepts of settings and channels also are used in planning health promotion and disease prevention programs. Settings refers to the best times, places, and states of mind for your target audience to pay attention to and act on the message you are promoting. Channels refer to ways your message can be delivered and the activities that can be used to deliver it. Channels can be media outlets, like television, radio, and print, or they can be more personal, such as someone's family, church, and community. In deciding the best settings and channels for your program activities, you may have to conduct research to learn where people go and how they prefer to get their health information.

For Further Reading

National Cancer Institute. (2004). *Making health communication programs work.* Retrieved from http://cancer.gov/pinkbook.

Summary

The purpose of this article was to help you become familiar with the history, major concepts, and theories currently being employed in health promotion and disease prevention efforts in your community and others. It highlights the importance of approaching health promotion and disease prevention activities from a careful and thoughtful perspective that uses both research and theories to plan and meet your objectives. With commitment and planning, you can be on your way to engaging in health promotion and disease prevention activities in your own community.

References

Ajzen, I., and Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* New Jersey: Prentice-Hall, Inc.

Andreason, A. (1995). *Marketing social change: Changing behavior to promote health, social development, and the environment.* San Francisco: Jossey-Bass.

Bandura, A. (1977). *Social learning theory.* New York: General Learning Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Beer, M., and Walton, A. E. (1987). Organization change and development. *Annual Review of Psychology, 38,* 339-367.

Beyer, J. M., and Trice, H. M. (1978). *Implementing change: Alcoholism policies in work organizations.* New York: Free Press.

Breslow, L. (1999). From disease prevention to health promotion. *Journal of the American Medical Association, 281*(11), 1030-1033.

Centers for Disease Control and Prevention. (1999). Framework for program evaluation in public health. *Morbidity and Mortality Weekly Report, 48*(No. RR-11). Retrieved from http://www.cdc.gov/eval/framework.htm#summary.

Coreil, J., Bryant, C., and Henderson, N. (2001). *Social and behavioral foundations of public health.* Thousand Oaks: Sage.

Department of Health and Human Services, Administration on Aging. (2004). *Health promotion/disease prevention*. Retrieved from http://www.aoa.gov/prof/adddiv/healthy/addiv_healthy.asp.

Family Health International. (1999). *Behavior change: A summary of four major theories.* Washington, DC: Family Health International.

Gavagan, T., and Brodyaga, L. (1998, March 1). Medical care for immigrants and refugees. *American Family Physician*. Retrieved from http://www.aafp.org/afp/980301ap/gavagan.html.

Glanz, K., Lewis, F. M., and Rimer, B. K. (Eds.). (1997). *Health behavior and health education* (2nd ed.). San Francisco: Jossey-Bass Publishers.

Glanz, K., Lewis, F. M., and Rimer, B. K. (Eds.). (2002). *Health behavior and health education: Theory, research, and practice* (3rd ed.). San Francisco: Jossey-Bass Publishers.

Green, L. W., Gottlieb, N. H., and Parcel, G. S. (1987). Diffusion theory extended and applied. In W. B. Ward (Ed.), *Advances in health education and promotion.* Greenwich, CT: JAI Press.

Green, L., and Kreuter, M. (1990). Health promotion as a public health strategy for 1990s. *Annual Review of Public Health, 11,* 313-334.

Green, L. W., and Kreuter, M. W. (1999). *Health promotion planning: An educational and ecological approach* (3rd ed.). Mountain View, CA: Mayfield.

Green, L. W., and Ottoson, J. M. (1999). *Community and population health* (8th ed.). New York: McGraw-Hill.

Gregson, J., Foerster, S., Orr, R., Jones, L., Benedict, J., Clarke, B., Hersey, J., Lewis, J., and Zotz, K. (2001). System, environmental, and policy changes: Using the social-ecological model as a framework for evaluating nutrition education and social marketing programs with low-income audiences. *Journal of Nutrition Education, 33*, S4-S15.

Hennekens, C. H., and Buring, J. E. (1987). *Epidemiology in medicine.* Boston: Little, Brown and Company.

Hochbaum, G. M. (1958). *Public participation in medical screening programs: A sociopsychological study* (PHS publication no. 572). Washington, DC: U.S. Government Printing Office.

Janz, N. K., and Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly, 11,* 1–47.

Kotler, P., and Roberto, E. L. (1989). *Social marketing: Strategies for changing public behavior.* New York: Free Press.

Lefebvre, R. C. (2000). Theories and models in social marketing. In P. N. Bloom and G. T. Gundlach (Eds.), *Handbook of marketing and society.* Thousand Oaks, CA: Sage.

Lefebvre, R. C., and Rochlin, L. (1997). Social marketing. In K. Glanz, F. M. Lewis, and B. K. Rimer (Eds.), *Health behavior and health education: Theory, research, and practice* (2nd ed.). San Francisco: Jossey-Bass.

McLeroy, K. R., Bibeau, D., Steckler, A., and Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly, 15,* 351-377.

Minkler, M., and Wallerstein, N. (Eds.). (2003). *Community-based participatory research for health.* San Francisco: Jossey-Bass.

National Cancer Institute. (1995). *Theory at a glance, a guide for health promotion.* Bethesda, MD: National Institutes of Health.

National Cancer Institute. (2004). *Making health communication programs work.* Retrieved from http://cancer.gov/pinkbook.

National Center for Health Promotion and Disease Prevention, Veterans Health Administration. (2004). *The VA history in health promotion and disease prevention*. Retrieved from http://www.nchpdp.med.va.gov/history.asp.

Ottawa Charter for Health Promotion. (1986). First International Conference on Health Promotion, Ottawa, Canada, 17–21 November 1986. Geneva, World Health Organization, 1986 (WHO/HPR/HEP/95.1). Retrieved August 2004 from http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf.

Palinkas, L. A., Pickwell, S. M., Brandstein, K., Clark, T. J., Hill, L. L., Moser, R. J., and Osman, A. (2003). The journey to wellness: Stages of refugee health promotion and disease prevention. *Journal of Immigrant Health, 5*(1), 19-28.

Porras, J. I., and Robertson, P. J. (1987). Organization development theory: A typology and evaluation. In R. W. Woodmen and W. A. Pasmore (Eds.), *Research in organization change and development.* Vol. 1. Greenwich, CT: JAI Press.

Prochaska, J. O., DiClemente, C. C., and Norcross, J. C. (1992). In search of how people change: Application in addictive behaviors. *American Psychologist, 47*(9), 1102-1112.

Prochaska, J. O., and Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion, 12*(1), 38-48.

Raczynski, J. M., and DiClemente, R. J. (Eds.). (1999). *Handbook of health promotion and disease prevention.* New York: Kluwer Academic/Plenum Publishers.

Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). New York: Free Press.

Rosenstock, I. M. (1960). What research in motivation suggests for public health. *American Journal of Public Health, 50,* 295-301.

Rosenstock, I. M. (1966). Why people use health services. *Milbank Memorial Fund Quarterly, 44,* 94-124.

Rothman, J., and Tropman, J. E. (1987). Models of community organization and macro practice: Their mixing and phasing. In F. M. Cox, J. L. Ehrlich, J. Rothman, and J. E. Tropman (Eds.), *Strategies of community organization* (4th ed.). Itasca, IL: Peacock.

Strecher, V. J., and Rosenstock, I. M. (1997). The health belief model. In K. Glanz, F. M. Lewis, and B. K. Rimer (Eds.), *Health behavior and health education: Theory, research, and practice* (2nd ed.). San Francisco: Jossey-Bass.

Toole, M. J., and Waldman, R. J. (1993). Refugees and displaced persons: War, hunger, and public health. *Journal of the American Medical Association, 270*(5), 600-606.

U.S. Surgeon General. (1996). *U.S. Surgeon General's report on physical activity and health, Chapter 6, Understanding and promoting physical activity.* Retrieved from http://www.cdc.gov/nccdphp/sgr/contents.htm.

Whitehead, D. (2004). Health promotion and health education: Advancing the concepts. *Journal of Advanced Nursing, 47*(3), 311-320.

Appendix A
Individual-Level Theories

Health Belief Model. The Health Belief Model (HBM) was originally developed to understand people's willingness to get vaccinated. It suggests that health-related behaviors depend on four individual attitudes or beliefs about an illness: (1) the potential seriousness of an illness, (2) the person's feeling of risk from that illness, (3) the benefits they feel they will receive for taking a preventive action, and (4) the barriers to taking that action (Hochbaum, 1958; Rosenstock, 1960, 1966). In using HBM, you would seek to identify individuals' different perceptions for each of these four areas and then use this information to develop programs that work toward changing these perceptions and, thus, increasing health-seeking behaviors.

For Further Reading

Janz, N. K., and Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly, 11,* 1–47.

Strecher, V. J., and Rosenstock, I. M. (1997). The health belief model. In K. Glanz, F. M. Lewis, and B. K. Rimer (Eds.), *Health behavior and health education: Theory, research, and practice* (2nd ed.). San Francisco: Jossey-Bass.

Stages of Change. Psychologists developed the Stages of Change model in 1982 to compare smokers in therapy along a behavior change continuum. Originally, they identified four stages of change: precontemplation, contemplation, action, and maintenance. The rationale behind "staging" people, as such, was to tailor therapy to a person's needs at his particular point in the change process. Since then, a fifth stage (preparation for action) has been incorporated into the theory, as well as 10 processes that help predict and motivate individual movement across stages. In addition, the stages are no longer considered to be linear; rather, they are components of a cyclical process that varies for each individual. The table on the following page displays the different stages of the model.

For Further Reading

Prochaska, J. O., DiClemente, C. C., and Norcross, J. C. (1992). In search of how people change: Application in addictive behaviors. *American Psychologist, 47*(9), 1102-1112.

Stages of Change Model

Stage	Definition	Goal
1. Precontemplation	Unaware of problem, hasn't thought about change	Increase awareness of need for change; personalize information on risks and benefits
2. Contemplation	Thinking about change, in the near future	Motivate; encourage to make specific plans
3. Decision/Determination	Making a plan to change	Assist in developing concrete action plans and setting gradual goals
4. Action	Implementation of specific action plans	Assist with feedback, problem solving, social support, and reinforcement
5. Maintenance	Continuation of desirable actions, or repeating periodic recommended steps	Assist in coping, reminders, finding alternatives, and avoiding slips/ relapses (as applies)

Adapted from the following: National Cancer Institute. (1995) *Theory at a glance, a guide for health promotion.* Bethesda, MD: National Institutes of Health.

Theory of Reasoned Action. The theory of reasoned action (Ajzen and Fishbein, 1980) states that individual performance of a given behavior is determined primarily by a person's intention to perform that behavior. This intention is determined by two major factors: (1) the person's attitude toward the behavior (i.e., beliefs about the outcomes of the behavior and the value of these outcomes) and (2) the influence of the person's social environment or subjective norm (i.e., beliefs about what other people think the person should do, as well as the person's motivation to comply with the opinions of others). The theory of planned behavior adds to the theory of reasoned action the concept of perceived control over the opportunities, resources, and skills necessary to perform a behavior. The concept of perceived behavioral control is similar to the concept of self-efficacy—an individual's perception of her ability to perform the behavior. Perceived behavioral control over opportunities, resources, and skills necessary to perform a behavior is believed to be a critical aspect of behavior change processes.

For Further Reading

Ajzen I., and Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* New Jersey: Prentice-Hall, Inc.

Appendix B
Interpersonal-Level Theories

Social Learning/Social Cognitive Theory. Social learning theory (Bandura, 1977), later renamed social cognitive theory (Bandura, 1986), proposes that behavior change is affected by environmental influences, personal factors, and attributes of the behavior itself. Each may affect or be affected by either of the other two. A central concept of social cognitive theory is that of self-efficacy. A person must believe in his ability to perform the behavior (i.e., the person must possess self-efficacy) and must perceive an incentive to do so (i.e., the person's positive expectations from performing the behavior must outweigh the negative expectations).

Additionally, a person must value the outcomes or consequences that she believes will occur as the result of performing a specific behavior or action. Outcomes may be classified as having immediate benefits (e.g., feeling energized after physical activity) or long-term benefits (e.g., experiencing improvements in cardiovascular health as a result of physical activity). But because these expected outcomes are filtered through a person's expectations or perceptions of being able to perform the behavior in the first place, self-efficacy is believed to be the most important characteristic that determines a person's behavior change. Self-efficacy can be increased in several ways, for example, by providing clear instructions, by providing the opportunity for skill development or training, and by modeling the desired behavior. To be effective, models must evoke trust, admiration, and respect from the observer; models must not, however, appear to represent a level of behavior that the observer is unable to visualize attaining.

For Further Reading

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Lefebvre, R. C. (2000). Theories and models in social marketing. In P. N. Bloom and G. T. Gundlach (Eds.), *Handbook of marketing and society.* Thousand Oaks, CA: Sage.

Appendix C
Community-Level Theories

Community Organization. These theories are rooted in understanding people's social networks and support systems. They emphasize active participation and the development of communities that can better evaluate and solve health and social problems. Specific models for community organization include Locality Development, Social Planning, and Social Action (Rothman and Tropman, 1987), each suggesting a different approach to influencing community environments. In addition, a key concept to emerge from these theories is the idea of empowerment, a process of gaining mastery and power over oneself and one's community to produce change.

For Further Reading

Rothman, J., and Tropman, J. E. (1987). Models of community organization and macro practice: Their mixing and phasing. In F. M. Cox, J. L. Ehrlich, J. Rothman, and J. E. Tropman (Eds.), *Strategies of community organization* (4th ed.). Itasca, IL: Peacock.

Diffusion of Innovations Theory. This theory addresses how new ideas, products, and social practices spread within a society or from one society to another.

For Further Reading

Green, L. W., Gottlieb, N. H., and Parcel, G. S. (1987). Diffusion theory extended and applied. In W. B. Ward (Ed.), *Advances in health education and promotion.* Greenwich, CT: JAI Press.

Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). New York: Free Press.

Theories of Organizational Change. This theory concerns the processes and strategies for increasing the chances that healthy policies and programs will be adopted and institutionalized within formal organizations. Specific theories to consider in changing organizations include Stage Theory (Beyer and Trice, 1978) and Organizational Development (Porras and Robertson, 1987).

For Further Reading

Beer, M., and Walton, A. E. (1987). Organization change and development. *Annual Review of Psychology, 38,* 339-367.

The description of the Health Belief Model, Theory of Reasoned Action, and Social Learning/ Social Cognitive Theory were adapted from the following: U.S. Surgeon General. (1996). *U.S. Surgeon General's report on physical activity and health, Chapter 6, Understanding and promoting physical activity.*
Retrieved from http://www.cdc.gov/nccdphp/sgr/contents.htm.

The description of the Stages of Change Model was taken from the following: Family Health International. (1999). *Behavior change: A summary of four major theories.* Washington, DC: Family Health International.

Information on community-level theories is found in the following: National Cancer Institute. (1995). *Theory at a glance, a guide for health promotion.* Bethesda, MD: National Institutes of Health.

In addition, the book *Health Behavior and Health Education: Theory, Research, and Practice*, by Glanz, Lewis, and Rimer (3rd ed., 2002), offers several helpful chapters on individual- and community-level theories.

NOTES